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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,592	01/22/2002	Guanggu Sun	0111.1L1	1218
7590 01/02/2004			EXAMINER	
David T. Bracken The Law Office of David T. Bracken 4839 Bond Avenue Orange, CA 92869			PRATT, HELEN F	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/051,592

Applicant(s)

SUN, GUANGGU

Examiner

Helen F. Pratt

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15 and 19 is/are rejected.
- 7) ☒ Claim(s) 13, 14 and 16-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11-18 are indefinite in the use of the phrase "liquid water". Water is a liquid, therefore the use of the word "liquid" is redundant.

Claim 16 is indefinite in the use of the phrase "is ingested by a human user with the gel coat powder before substantial swelling of the glucomannan occurs". It is not known what is intended by this phrase. Perhaps the phrase could read "and is ingested by a human user before substantial swelling of the glucomannan occurs".

Claim 19 is indefinite in the use of the phrase "such as". The phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 13-14, 16-18 are indefinite in the use of the phrase "substantial swelling of the glucomannan". The specification does not give a definition for this phrase and it is not known what amount of swelling can be allowed. However, the specification does give a time limit for the delay of viscosity of 5-10 minutes which could be added to the claims and would be more definite (page 4, lines 23-30).

**Miscellaneous**

It is noted in claim 1, "glucommannan" should be "glucomannan".

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-7, 11, 12, 15 are rejected under 35 U.S.C. 102(a) as being anticipated by Takata (6,558,652).

Takata '652 discloses a process of making a particulate glucomannan gel as in claims 1 and 6, by swelling the glucomannan flour with water in the presence of water/ethanol (40-50% ethanol) and treating the swollen particles with an alkali (sodium hydroxide or sodium carbonate) to form gelled particles followed by drying (abstract). The flour is a commercially available glucomannan powder with a particle size of 100-200 mesh which is less than the claimed size of 160 microns (100 mesh equals 149 microns). A gel membrane is seen to have formed because the process is the same and the reference discloses that a hydrogel is formed and that "gelled flour particles are formed" (col. 1, lines 30-40, col. 2, lines 19-49).

The mixture is filtered as in claim 2 to remove liquid (col. 3, lines 40-49).

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The first filtered solids is contacted with 50% aqueous ethanol as in claim 3, and the mixture was centrifuged to obtain a wet cake and the mixture is filtered to form a second filtered solids as in claim 4 and then dried as in claim 5 (col. 3, lines 5-15).

The mixture as in step (a) is allowed to stand for 2 hours as in claim 7.

The gel-coated powder is contacted with substantial amounts of water as in claim 11 (col. 3, lines 50-70, and col. 4, lines 1-31).

The water is prevented as in claim 12 from being absorbed by the glucomannan by the gel coat for more than 2 minutes, since, the above process has been shown, and therefore, the preventative gel coat is the same.

Claim 15 further requires that the gel-coated powder be contacted with small amounts of a liquid. Takata discloses adding the gel-coated powder to water to make a cleaning foam, toothpaste or cleaning powder (col. 3, lines 25-54). The particular amount of water is not disclosed. These items inherently contain small amounts of water or they wouldn't be able to function as foams, toothpastes or cleaning powders.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takata.

Claim 8 further requires that the mixture of step a is allowed to remain in an undisturbed state for less than ten minutes and claim 9, that the mixture of step b is left for 10 minutes and step 10 for 30 minutes. However, it is seen that as the function of each alcohol in step a of precipitating konjac is known (col. 2, lines 15-19) and the function of the sodium or calcium salt solution is known which is to give discrete hydrogels (col. 2, lines 32-40), then it would have been within the skill of the ordinary worker to maintain the konjac flour in undisturbed states as in steps a and b in order for the reactants to perform there known functions to a particular degree of precipitation and gel strength. Therefore, it would have been obvious to allow the konjac (glucomannan) to remain in an undisturbed state in the various steps for particular lengths of time.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takata as applied to the above claims, and further in view of Kubodera (4,851,394).

Claim 19 further requires that the gel-coated powder can be other fibers such as guar or alginic gum. Kubodera discloses a process of making a glucomannan gel by mixing the glucomannan with a polyhydric alcohol in the presence of an alkali which can be sodium carbonate (abstract and col. 4, lines 29-40 and col. 3, lines 59-64, col. 4, lines 1-25). Even though Kubodera does not use the claimed particle size of konjac (glucomannan), he does disclose that gelled konjac can be produced by the claimed method (col. 3, lines 25-35 and col. 5, lines 5-10) and he does use small particle sizes of konjac. Therefore, it would have been obvious to use other soluble fibers to make a gel coated powder.

***Allowable Subject Matter***


Claims 13, 14, 16-18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 703-308-1978. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on (703) 308-3959. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Hp 12-16-03

  
**HELEN PRATT**  
**PRIMARY EXAMINER**